

Arrowhead Regional Medical Center



2015

Consumer Confidence Report

**Esta informe contiene informacion muy importante sobre su agua beber.
Traduzcalo o hable con alguien que lo entienda bien.**

To our water system users:

We're very pleased to provide you with this year's Annual Water Quality Report. We want to keep you informed about the quality of water and services we have supplied to you over the past year. Our goal is, and always has been, to provide to you a safe and dependable supply of drinking water. Our water source is one groundwater well located on the East side of our facility, blended with water purchased from the City of Colton. This report shows the quality of our produced and distributed water and what it means. Please contact us if you have any questions.

Arrowhead Regional Medical Center routinely monitors for contaminants in your drinking water according to Federal and State laws. The enclosed tables show the results of water quality monitoring for produced, purchased, and distributed water, for the period of January 1 to December 31, 2015. All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some contaminants. It is important to remember that the presence of these contaminants does not necessarily pose a health risk.

Under our Water Supply Permit with the County of San Bernardino, Department of Environmental Health Services, water quality monitoring is completed as required. These tests may include microbial contaminants, inorganic chemical contaminants, and organic chemical contaminants. Every effort is made to insure that your drinking water meets or exceeds all Federal and State requirements. Regulations require the testing of the water to ensure that it is safe to drink.

All drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the US Environmental Protection Agency's (USEPA) Safe Drinking Water Hotline at 1-800-426-4791.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. USEPA/Center for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

The sources of drinking water (both tap and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals, and in some cases, radioactive material, and can pickup substances resulting from the presence of animal or human activity.

Contaminants that may be in source water include:

Microbial contaminants, such as viruses and bacteria, that come from sewage treatment plants, septic systems, livestock operations, and wildlife.

Inorganic contaminants, such as salts and metals, that can be naturally occurring or result from urban storm water runoff, industrial or domestic waste water discharges, oil and gas production, mining or farming.

Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.

Organic chemical contaminants that are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, agricultural application and septic systems.

Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, the USEPA and the State Department of Public Health (Department) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. Department regulations also establish limits for contaminants in bottled water that must provide the same protection for public health.

Please call our office if you have questions.

For additional information contact:

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Terms and Abbreviations

In the following Test Result Table you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms we've provided the following definitions:

- **Non-Detects (ND)** – laboratory analysis indicates that the constituent is not present.
- **Parts per million (ppm) or Milligrams per liter (mg/l)** – one part per million corresponds to one minute in two years or a single penny in \$10,000.
- **Parts per billion (ppb) or Micrograms per liter (ug/l)** – one part per billion corresponds to one minute in 2,000 years or a single penny in \$10,000,000.
- **Picocuries per liter (pCi/L)** – picocuries per liter is a measure of the radioactivity in water.
- **Million fibers per Liter (MFL)** – million fibers per liter is a measure of the presence of asbestos fibers that are longer than 10 micrometers.
- **Nephelometric Turbidity Unit (NTU)** – nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.
- **Treatment Technique (TT)** – A treatment technique is a required process intended to reduce the level of a contaminant in drinking water.
- **Maximum Contaminant Level (MCL)** – the “Maximum Allowed” (MCL) is the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.
- **Maximum Contaminant Level Goal (MCLG)** – the “Goal” (MCLG) is the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.
- **Public Health Goal or PHG** – the level of a contaminant in drinking water below which there is no known or expected risk to health. The California Environmental Protection Agency sets PHGs.
- **Regulated Action Level (AL)** – The concentration of a contaminant, which, if exceeded, triggers treatment, or other requirements, which a water system must follow.
- **Public Drinking Water Standards (PDWS)** – MCLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.
- **N/A** – No standard available.

Issues to Know About:

NITRATE IN DRINKING WATER

Nitrate in drinking water at levels above 45 mg/L is a health risk for infants of less than six months of age. Such nitrate levels in drinking water can interfere with the capacity of the infant's blood to carry oxygen, resulting in serious illness; symptoms include shortness of breath and blueness of the skin. Nitrate levels above 45 mg/L may also affect the ability of the blood to carry oxygen in other individuals, such as pregnant women and those with specific enzyme deficiencies. If you are caring for an infant, or you are pregnant, you should ask advice from your health care provider.

PERCHLORATE IN DRINKING WATER

Perchlorate has been shown to interfere with uptake of iodide by the thyroid gland, and to thereby reduce the production of thyroid hormones, leading to adverse effects associated with inadequate hormone levels. Thyroid hormones are needed for normal prenatal growth and development of the fetus, as well as for normal growth and development in the infant and child. In adults, thyroid hormones are needed for normal metabolism and mental function.

LEAD IN DRINKING WATER

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and plumbing fixtures. Water purveyors are responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When water has been sitting for several hours, you can minimize the potential for lead exposure by flushing the tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline at 1-800-426-4791 or <http://www.epa.gov/safewater/lead>.

ARROWHEAD REGIONAL MEDICAL CENTER

PRODUCTION MONITORING TABLE FOR JANUARY 1 - DECEMBER 31, 2015

PRIMARY STANDARDS - Mandatory, Health-Related Standards by the State of California Department of Public Health

MICROBIOLOGICAL CONTAMINANTS			Total Coliform Bacteria					
	Violation	Units	MCLG	PHG	MCL	RANGE	# of Months Positive	Likely Source of Detected Constituent
Col. Bac.(% Test Positive)	No	%+	0	0	1	0	0	Naturally present in the environment
No. of Acute Violations©	0	Units	0	0	0	0	0	24 Bacteriological samples were collected in 2015

RADIOACTIVE CONTAMINANTS

	Violation	Units	MCLG	PHG	MCL	RANGE	LEVEL	Date	Likely Source of Detected Constituent
Gross Alpha Activity	No	pCi/l	0	n/a	15	3.8-5.9	4.8	4/28-11/10/10	Erosion of natural deposits.

INORGANIC CONTAMINANTS

Fluoride	No	mg/l	1	1	2	0.25	0.25	8/21/2015	Erosion of natural deposits.
Nitrate (as NO3)	No	mg/l	45	45	45	20-31	28	1/8-12/8/15	Runoff/ leaching from fertilizer leaching from septic tanks and sewage; erosion
(Distribution System)									
Hexavalent Chromium	No	ug/l	0.02	0.02	10	2.9	2.9	10/10/2014	Factory or Erosion of natural deposits.

LEAD + COPPER - Mandatory, Health-Related Standards by the State of California Department of Public Health

			No. of Samples	90th Activation Percent	No. of Samples				
	Violation	Units	Collected	Level	Level	Exceeding	MCLG	Date	Likely Source of Detected Constituent
Lead	No	ug/l	10	AL=15	ND	0	2	10/2/2013	Corrosion of household water systems; industrial manufacturers; erosion
Copper	No	mg/l	10	AL=1.3	0.135	0	0.3	10/2/2013	Corrosion of household plumbing; erosion of natural deposits; leaching.

DISINFECTION BYPRODUCTS, DISINFECTANT RESIDUALS, AND DISINFECTION BYPRODUCT PRECURSORS

	Violation	Units	MCLG	PHG	MCL	RANGE	LEVEL	Date	Likely Source of Detected Constituent
TTHMs	No	ug/l	n/a	n/a	80	ND	ND	6/29/2015	Byproduct of drinking water chlorination.
HAA5	No	ug/l	n/a	n/a	60	ND	ND	6/29/2015	Byproduct of drinking water chlorination.

SECONDARY STANDARD - Aesthetic Standards Established by the State of California Department of Public Health

	Violation	Units	MCLG	PHG	MCL	RANGE	LEVEL	Date	Likely Source of Detected Constituent
Chloride	No	mg/l	n/a	n/a	500	12	12	9/28/2011	Runoff / leaching from natural deposits.
Sulfate	No	mg/l	n/a	n/a	500	38	38	9/28/2011	Runoff / leaching from natural deposits.
Specific Conductance	No	umhos/cm	n/a	n/a	1600	540	540	9/28/2011	Substances that form ions if in water
Total Dissolved Solids	No	mg/l	n/a	n/a	1000	340	340	9/28/2011	Runoff / leaching from natural deposits.

UNREGULATED CONTAMINANTS

	Violation	Units	MCLG	PHG	MCL	RANGE	LEVEL	Date	
Sodium	No	mg/l	n/a	n/a	n/a	19	19	9/28/2011	No Standard for MCL
Calcium	No	mg/l	n/a	n/a	n/a	80	80	9/28/2011	No Standard for MCL
Magnesium	No	mg/l	n/a	n/a	n/a	9.9	9.9	9/28/2011	No Standard for MCL
pH	No	pH	n/a	n/a	n/a	7.8	7.8	9/28/2011	No Standard for MCL
Potassium	No	mg/l	n/a	n/a	n/a	2.8	2.8	9/28/2011	No Standard for MCL
Total Hardness (CaCO3)	No	mg/l	n/a	n/a	n/a	230	230	9/28/2011	No Standard for MCL
Total Alkalinity (CaCO3)	No	mg/l	n/a	n/a	n/a	160	160	9/28/2011	No Standard for MCL
Vanadium	No	ug/l	Notification Level 50 ug/l			3.6	3.6	8/21/2015	No Standard for MCL

REGULATED CONTAMINANTS

Perchlorate	No	ug/l	6	6	6	ND	ND	1/24-12/27/13	Component of solid rocket fuel, fireworks, matches, & explosives
(Distribution System)									

During Calander Year 2015, Arrowhead Regional Medical Center (ARMC) purchased 99.6% of the water delivered to the distribution system from the City of Colton, and produced 0.4% with the onsite well. The ARMC onsite well produces water that exceeds the MCL for Nitrate and Perchlorate. The production water from this well is blended with water supplied by the City of Colton. Water distributed to the system has an average Nitrate level of 28 mg/L which is below the MCL. The ARMC well water is filtered through an ion exchange process for Perchlorate prior to distribution. After this process, water delivered to the distribution system has a non detectable level for Perchlorate.

CITY OF COLTON - WATER DEPARTMENT

MONITORING TABLE FOR JANUARY 1 - DECEMBER 31, 2015

Contaminant	Violation	TEST RESULTS			UNIT MEASURE	STATE MCL	STATE PHG	YEAR TESTED*	LIKELY SOURCE OF CONTAMINANT
	Y / N	Minimum	Maximum	Average					
INORGANIC CHEMICALS - PRIMARY STANDARDS									
Fluoride	N	0.26	0.75	0.4	mg/l	2	1	2015	Erosion of natural deposits, water additive for dental hygiene, discharge from fertilizer and aluminum factories
Nitrate (as NO3)	N	0	30	9.8	mg/l	45	45	2015	Runoff / leaching from fertilizer use, septic tanks, sewage, and erosion of natural deposits
Nitrate+Nitrite as Nitrogen	N	0	7.6	2.7	mg/l	10	10	2014	Runoff / leaching from fertilizer use, septic tanks, sewage, and erosion of natural deposits
CHEMICAL PARAMETERS - SECONDARY STANDARDS									
Chloride	N	5.5	42	13.25	mg/l	500	NS	2015	Runoff / leaching from natural deposits; seawater influence Natural or industrial-influenced balance of hydrogen, carbon & oxygen in water, affected by temperature and other factors.
Corrosivity (Langlier Index)**	N	0.34	0.61	0.49	units	NC	NS	2014	
Aggressiveness Index ***	N	12.15	12.4	12.27	units	NS	NS	2014	
Iron	N	0	9.3	0.93	ug/l	300	NS	2015	Leaching from natural deposits
Manganese	N	0	40	6.6	ug/l	50	NS	2015	Leaching from natural deposits
Specific Conductance	N	320	720	485	umhos	1600	NS	2015	Substances that form ions in water; seawater influence
Sulfate	N	14	110	48.8	mg/l	500	NS	2015	Runoff / leaching from natural deposits, industrial wastes
Total Dissolved Solids	N	210	510	309	mg/l	1000	NS	2015	Runoff / leaching from natural deposits
PHYSICAL PARAMETERS									
Odor - Threshold	N	1	1	1	TON	3	NS	2014	Naturally occurring organic materials
pH	N	7.6	7.9	7.78	units	NS	NS	2014	
Turbidity	N	0	0.6	0.2	NTU	5	N/A	2014	Turbidity is monitored because it is a good indicator of water quality. High turbidity can hinder disinfectant effectiveness.
RADIONUCLIDES									
Gross Alpha Particle Activity	N	0	6.2	4.2	pCi/L	15	NS	2015	Erosion of natural deposits
Radon 222	N	229	458	333.3	pCi/L	NS	NS	2000	Erosion of natural deposits
Uranium	N	0	6.9	1.7	pCi/L	20	0.43	2015	Erosion of natural deposits
VOLATILE ORGANIC CHEMICALS (VOC's)									
Tetrachloroethylene	N	ND	ND	ND	ug/l	5	0.06	2013	Leaching from PVC pipes, discharge from factories, dry cleaners and auto shops (metal degreaser)
ADDITIONAL PARAMETERS									
Alkalinity	N	140	210	178	mg/l	NS	NS	2015	
Bicarbonate Alkalinity	N	170	260	216	mg/l	NS	NS	2015	
Calcium	N	41	93	64	mg/l	NS	NS	2015	
Total Hardness	N	140	290	207	mg/l	NS	NS	2015	
Magnesium	N	7.1	14	10.8	mg/l	NS	NS	2015	
Potassium	N	1.5	3.8	2.92	mg/l	NS	NS	2015	
Sodium	N	12	58	22.6	mg/l	NS	NS	2015	
Boron	N	0	210	36	mg/l	NS	NS	2015	
DISTRIBUTION SYSTEM									
Microbiological-Total Coliform Bacteria	N	ND	ND	ND	Presence of coliform bacteria in 5% of monthly samples****			2015	Nauturally present in the environment
Total Trihalomethanes	N	0	6.2	6.2	ug/l	80	NS	2015	By-product of drinking water chlorination
Haloacetic Acids	N	0	0.6	0.6	ug/l	60	NS	2015	By-product of drinking water chlorination
Chlorine	N	0.84	1.3	0.97	mg/l	4	4	2015	Drinking water disinfectant added for treatment
REGULATED CONTAMINANTS(Perchlorate)									
Perchlorate	N	0	3.6	0.71	ug/l	6	1	2015	Component of explosives, fireworks, matches, and solid rocket fuels.

LEAD AND COPPER

The Lead & Copper Rule became effective in 1993. The City of Colton has performed eight rounds of sampling. The last round was performed in August 2013. Next round is scheduled for 2016. All samples are taken from the first draw of morning water. The first two rounds were from 60 single-family residences with copper pipe with lead solder installed since 1982. The 1998, 2001, 2004, 2007, 2010 & 2013 sampling included only 30 single-family residences due to favorable results in the previous sampling round. The next round is scheduled for August 2016. The 2013 results were:

Contaminant	90th Percentile Result	Unit Measurement	MCL	PHG	LIKELY SOURCE OF CONTAMINANT
LEAD	0	ug/l	AL 15	2	Internal corrosion of household plumbing systems, discharge from industrial mfg, erosion of natural deposits
COPPER	180	ug/l	AL 1300	300	Internal corrosion of household plumbing systems, erosion of natural deposits.